

CHIN-JOU LI

✉ chinjouli@andrew.cmu.edu ☎ (412)214-2003 🌐 chinjouli.github.io/mysite

EDUCATION

Carnegie Mellon University

Pittsburgh, PA

Master of Science in Intelligent Information Systems, Language Technologies Institute | GPA: 3.9/4.0

Dec 2025

- Selected Coursework: Advanced NLP, Speech Recognition and Understanding;
- Currently taking Multimodal ML, Subword Modeling

National Taiwan University

Taipei, Taiwan

Bachelor of Science, Computer Science and Information Engineering | GPA: 3.99/4.30

June 2024

- Selected Coursework: Algorithm Design and Analysis, ML, Applied DL, NLP
- Chinese-English Translation and Interpretation Program

SKILLS

Technical skills Speech & Natural Language Processing, Deep Learning, PyTorch, Linux, Python, C/C++

Languages Chinese (Native), English (Fluent), French (Intermediate)

RESEARCH EXPERIENCE

ChangeLing Lab, Carnegie Mellon University

Pittsburgh, PA

Graduate Researcher

Sep 2024 - Present

- Advised by Prof. David Mortensen
- Exploring phonetic-based speech modeling and inclusive speech recognition

Intelligent Agents Lab, National Taiwan University

Taipei, Taiwan

Undergraduate Researcher

Oct 2022 - June 2024

- Advised by Prof. Jane Yung-Jen Hsu
- Handled natural language data in the Trustworthy AI Dialogue Engine (TAIDE) project

Biomedical Acoustic Signal Processing Lab, Academia Sinica

Taipei, Taiwan

Research Assistant

July 2022 - Feb 2024

- Advised by Prof. Yu Tsao and Dr. Jen-Cheng Hou
- Researched audio-visual speech enhancement and audio-visual speaker diarization

Taipei Veterans General Hospital

Taipei, Taiwan

Research Assistant

Jan 2023 - Dec 2023

- Evaluated face transformation in seizure dataset for privacy protection
- Investigated action recognition through transformer for predicting seizure types

SELECTED PUBLICATIONS

Efficient Many-Shot In-Context Learning with Dynamic Block-Sparse Attention

Under Review

Emily Xiao, **Chin-Jou Li**, Yilin Zhang, Graham Neubig, Amanda Bertsch

Epileptic Seizure Classification with Patient-Level and Video-Level Contrastive Pretraining

EMBC 2024

Chin-Jou Li, Chien-Chen Chou, Yen-Cheng Shih, Li-Chuan Kuo, Yu-Te Wang, Aileen McGonigal, Hsiang-Yu Yu, Jen-Cheng Hou, Yu Tsao

Deep Complex U-Net with Conformer for Audio-Visual Speech Enhancement

Interspeech 2024 Workshop

Shafique Ahmed, Chia-Wei Chen, Wenze Ren, **Chin-Jou Li**, Ernie Chu, Jun-Cheng Chen, Amir Hussain, Hsin-Min Wang, Yu Tsao, Jen-Cheng Hou

AI-based face transformation in patient seizure videos for privacy protection

MCP: Digital Health

Jen-Cheng Hou, **Chin-Jou Li**, Chien-Chen Chou, Yen-Cheng Shih, Si-Lei Fong, Stephane Dufau, Po-Tso Lin, Yu Tsao, Aileen McGonigal, Hsiang-Yu Yu

SELECTED PROJECTS

ChangeLing Lab, Carnegie Mellon University

Pittsburgh, PA

Phonetic Speech Foundation Model

Sep 2024 - Present

- Building speech foundation model supporting phoneme recognition, co-advised by Prof. Shinji Watanabe

ChangeLing Lab, Carnegie Mellon University

Pittsburgh, PA

Data Augmentation for Pathological Speech

Sep 2024 - Present

- Investigating voice conversion on cross-lingual dysarthric speech
- Reduced dysarthric ASR's character error rate by at least 10% across datasets

Advanced Natural Language Processing, Carnegie Mellon University

Pittsburgh, PA

Efficient Many-Shot In-Context Learning

Nov 2024 - Feb 2025

- Developed block-sparse attention cache retrieval for ICL, advised by Prof. Graham Neubig
- Achieved comparable latency while stably maintaining >95% of best methods' accuracy

Speech Recognition and Understanding, Carnegie Mellon University

Pittsburgh, PA

Training Decoder-Only ASR with Long Context

Oct 2024 - Dec 2024

- Explored techniques for handling extended context with limited computing resource
- Applied RoPE and cache retrieval to an ASR system

Intelligent Agents Lab, National Taiwan University

Taipei, Taiwan

Trustworthy AI Dialogue Engine (TAIDE)

Mar 2023 - June 2024

- Visualized dataset diversity via Elasticsearch and Kibana
- Constructed LLM hallucination benchmarks in Traditional Chinese

Biomedical Acoustic Signal Processing Lab, Academia Sinica

Taipei, Taiwan

EGO4D Audio-Visual Speaker Diarization Challenge 2023

March 2023 - May 2023

- Coordinated team to establish pipeline of face tracking, speaker detection and identification
- Enhanced validation set accuracy by 5% and diarization error rate by 3%

LEADERSHIP EXPERIENCE

II-4/6II Natural Language Processing, Carnegie Mellon University

Pittsburgh, PA

Teaching Assistant

Jan 2025 - Present

Path to AI Research, Carnegie Mellon University

Pittsburgh, PA

Mentor

Sep 2024 - Dec 2024

Network Administration and System Administration Team, National Taiwan University

Taipei, Taiwan

Teaching Assistant / DNS Group Member

Sep 2022 - June 2024

French (I) and French (II), National Taiwan University

Taipei, Taiwan

Teaching Assistant

Sep 2022 - June 2024

Open Culture Foundation

Taipei, Taiwan

Intern

Sep 2023 - Jan 2024